

Amendments to the Specification:

Please amend the paragraph at page 5, lines 9-16 as follows:

Japanese Unexamined Patent Application Publication No. 61-140355 has disclosed a mold and an upper structure of the mold. The mold has static magnetic fields at its wide faces for controlling the molten steel ~~electrical~~ current fed into the mold, and traveling magnetic field generators are disposed above the mold so as to allow the upper surface of the molten steel to flow from the center of its horizontal section toward the narrow faces.

Please amend the paragraph at page 8, lines 6-10 as follows:

"Tetsu-to-Hagane" 1980, 66, p. ~~797~~ 197 has disclosed a technique (so-called M-EMS) in which a continuous slab casting apparatus produces a rotating flow of a molten steel in the horizontal direction along the walls of a mold by electromagnetic agitation.

Please amend the paragraph at page 24, line 24 to page 25, line 1, as follows:

Fig. 24 is a diagram of the changes in phase with time of current locally shifting peak positions of a ~~traveling~~ vibrating magnetic field.

Please amend the paragraph at page 25, lines 2-4 as follows:

Fig. 25 is another diagram of the changes in phase with time of current locally shifting peak positions of a ~~traveling~~ vibrating magnetic field.

Please amend the paragraph at page 32, lines 15-21 as follows:

By applying a static magnetic field in the ~~thickness~~ widthwise direction of the mold 10, the molten flow rate around the center of the mold 10 can be reduced to prevent the entrainment of mold flux. Also, by superimposing the static magnetic field on the vibrating magnetic field, term B of the equation $F = J \times B$ can be increased, and the Lorentz force can be further increased accordingly.

**Please amend the paragraph at page 37, line 21 to page 38,
line 6, as follows:**

Fig. 20 shows an arrangement in which vibrating magnetic field generators 20 and static magnetic field generators 30 are disposed at the wide face sides of the mold 10. A pair of magnetic poles 28 of the static magnetic field generators 30 are disposed at the wide face sides of the mold 10 with the mold 10 therebetween, and a DC power source 32 applies a direct current to DC coils 34 to apply static magnetic fields in the ~~thickness~~ widthwise direction of the mold 10. The vertical positions of the static magnetic field generator 30 and the vibrating magnetic field generator 20 may be the same or different.

Please amend the paragraph at page 43, lines 1-6 as follows:

For coils, the sinking comb-shaped iron cores, each having 12 equal teeth aligned in the width direction of the cast slab, as shown in Fig. 1, were used. The coils were arranged so as to generate magnetic fields whose phases were reversed alternately in the width direction of the cast slab (that is, vibrating magnetic field).

Please amend the paragraph at page 44, line 24 to page 45, line 4, as follows:

For coils, the sinking comb-shaped iron cores, each having 12 equal teeth aligned in the width direction of the cast slab, as shown in Fig. 6, were used. The coils were arranged so as to generate magnetic fields whose phases were reversed alternately in the width direction of the cast slab (that is, vibrating magnetic field).